MRSA Reporting and Control Guidelines

PROVIDED BY THE HENRICO COUNTY HEALTH DEPARTMENT

2006/2007 Season

Detecting MRSA

Methicillin-resistant *Staphylococcus aureus* (MRSA) are bacteria that are resistant to all beta-lactam antibiotics and to cephalosporins. A resident or staff member may be **colonized** with MRSA; meaning that he/she has the bacteria living on the surface of his/her hands or in the nasal passage but there is no tissue damage being caused by the organism. MRSA is often transmitted by individuals who unknowingly spread the bacteria via colonized hands.

A MRSA **infection** causes tissue damage and presents as a variety of illnesses, such as abscesses, endocarditis, pneumonia, osteomyelittis, and toxic shock syndrome. Clinical and epidemiologic patterns of illness differ in different populations. In LTCF, MRSA infections often occur when a resident or staff member has an open wound, a boil, or another skin and soft tissue infection (SSTI) that is infected with the bacteria. There are many risk factors associated with developing a MRSA infection, including:

- Hospitalization or admission to other healthcare facilities
- Surgery
- Underlying health conditions (diabetes)
- Multiple antibiotic therapy
- Permanent indwelling catheters or other medical devices
- Sharing of contaminated items (towels, sports gear)
- Injection drug users
- Crowded living conditions
- Shared spaces (sauna benches, hot tubs)
- Certain populations

An outbreak of MRSA infections or SSTIs should be considered whenever three or more residents or staff members located in close proximity develop SSTIs such as wounds or boils within one week.

Reporting MRSA

If an increase in MRSA SSTIs or MRSA pneumonia is observed, use the attached **MRSA Surveillance Line Listing** to record cases. You are legally required to report any suspected outbreak of MRSA within your facility. You should report an outbreak by contacting the Henrico County Health Department Epidemiologist or Communicable Disease Nurse at (804) 501-4522.

Controlling MRSA

In general, the following measures (The 4 C's) should be taken to control a cluster or outbreak of **MRSA Skin and Soft Tissue Infections (SSTIs).** (These recommendations do not pertain to outbreaks of MRSA pneumonia):

Care

- Incision and drainage of MRSA SSTIs is the recommended treatment for these types of infections.
- Antibiotic treatment is generally not recommended for MRSA SSTIs; however, MRSA SSTIs may be
 treated with antibiotics if the degree of infection warrants treatment. An SSTI should always be
 cultured to determine the organism that is causing tissue damage and what antibiotics that organism is
 resistant and susceptible to for proper treatment.

• Any resident with MRSA SSTI should have the wound or boil covered with a clean, dry, sterile bandage whenever the resident is in contact with others. Such as during group activities, physical therapy, or meal times. If wound drainage is significant and the bandage becomes noticeably soiled, it may be necessary to restrict the patient from activities until drainage has ceased.

Cohort

- Reduce direct contact activities among residents. Ensure that those with MRSA SSTIs have wound covered with a clean, dry sterile bandage.
- Cohort residents with MRSA SSTIs and separate from residents who are not infected. Instruct all residents in thorough hand washing techniques.
- Assign staff to work with either MRSA-infected residents or residents without MRSA infections to
 prevent the transmission of the bacteria between residents. Research has shown that colonized hands
 are the most effective transmitter of the bacteria.

Clean

- Sanitize contact surfaces frequently to prevent the spread of the virus and use protective equipment. Contact surfaces include any items that are touched frequently, such as handrails, doorknobs, physical/occupational therapy equipment.
- Not all cleaners are effective or approved for sanitation and disinfection or surfaces potentially
 contaminated with MRSA bacteria. A list of EPA approved cleaners can be found at the following
 website: http://www.epa.gov/oppad001/chemregindex.htm under "Selected EPA-registered
 Disinfectants."
- Contaminated linen, such as bed sheets with wound drainage, should be placed in laundry bags and washed separately in hot water for a complete wash cycle. Contaminated clothing should be washed in the hottest water considered safe for the material.

Curb

- Institute droplet precautions. Staff should be reminded that they can spread the virus via their hands or fomites (e.g., towels, medication, cart items, etc.). Staff must wear gloves when providing patient care, wash their hands, and then change into fresh gloves before working with the next resident. Staff should always wear masks when performing or assisting with incision and drainage procedures. Staff may consider wearing masks when dressing or caring for the SSTI because the mask acts a barrier to prevent the staff member from touching his/her face.
- Post signs warning of MRSA SSTI cluster or outbreak for visitors at entry ways. Offer hand sanitizers at entry ways and frequent use areas. Because MRSA is often transmitted by colonized hands, it is important that visitors wash hands or use hand sanitizers when interacting with residents.